

ABSTRACT OF THE DISCLOSURE

A cache table management device for raising the cache hit probability for entries inserted in groups between a forwarding table 103 and cache 102. A forwarding table 103 stores the priority

5 level of entries inserted and extracted in a cache 102. A packet processing circuit 101 extracts the destination address from the received packet, searches the packet using the destination address, and searches the forwarding table if no hits occur.

The hit database 104 stores the contents of the forwarding table for all forwarding table entries, as well as rating values for the cache usage status. An entry selection device 105 refers to the hit database when an entry must be added or deleted between the forwarding table and the cache, and selects the corresponding entry group. That determination is made utilizing typical values

15 for attributes of the priority level such as the average bit rate of each entry group.